AMENDMENTS TO SPECIFICATION

Page 12, line 11 to Page 13, line 3:

Assuming that a codebook vector of an index (k) is c_k, an ~~optical~~ optimal code vector is selected as a codebook vector, which maximizes the following Formula 8.

[Equation 8]

$$T_k = \frac{C_k^2}{E_k} = \frac{(d^T c_k)^2}{c_k^T \Phi c_k}$$

in which **d** is a correlation vector between the object signal **x'(n)** and an impulse response **h(n)** of a composite filter, and Φ is a correlation matrix with **h(n)**. That is, **d** and Φ are represented with the following Formulas 9 and 10.

[Formula 9]

$$d(n) = \sum_{i=n}^{39} x'(i)h(i - n) \qquad i = 0, 1, ..., 39$$

[Formula 10]

$$\Phi(i, j) = \sum_{n=j}^{39} h(n - i)h(n - j) \qquad i = 0, ..., 39 \; ; j = i, ...39.$$